

meningitis. There have been abscess or sinus thrombosis developed.

Dr. Ide: Appreciate Dr. Moore's remarks about reflexes, etc. Decompression can be done without opening mastoid, can go through the squamous plate of temporal bone.

Dr. Miller: Dr. Moore shot over our heads. We feel very grateful to him. Will test reflexes more frequently and accurately also.

On motion of Dr. Miller, the section voted thanks to Drs. Ide, Moore and Hill.

The meeting adjourned.

C. G. STIVERS, M. D.,
Secretary.

SACRAMENTO COUNTY.

The regular monthly meeting of the Sacramento Society for Medical Improvement was held at the Hotel Sacramento, Tuesday evening, April 24. President Dr. C. P. Jones in the chair.

The minutes of the previous regular meeting were read and approved.

The paper of the evening on "The Water Problem of Sacramento," was read by Dr. A. W. Sawyer, Secretary of the State Board of Health.

Discussion opened by Dr. Charles Gilman Hyde, of the University of California, followed by Mr. F. C. Miller, City Engineer of Sacramento, Dr. James H. Parkinson, Dr. T. W. Huntington of San Francisco, Dr. A. M. Henderson, and Dr. W. E. Briggs.

Discussion closed by Dr. Sawyer and Dr. Hyde. Dr. Albert F. Welin of Rio Vista, was elected to membership.

At the luncheon following the meeting, Dr. Thomas W. Huntington of San Francisco, delivered an address on the Officers' Reserve Corps, United States Army, as it applied to the medical profession.

W. A. BEATTIE, Secretary.

SAN JOAQUIN COUNTY.

The regular monthly meeting of the San Joaquin County Medical Society was held at the residence of Dr. J. T. Davison, Friday evening, April 27. Those present were: Drs. J. D. Dameron, B. J. Powell, R. B. Knight, H. F. Sanderson, Minerva Goodman, H. C. Petersen, Hudson Smythe, J. V. Craviotto, R. R. Hammond, I. S. Zeimer, W. F. Priestly, H. J. Bolinger, E. B. Todd, J. T. Davison, E. A. Arthur, C. F. English, C. R. Harry, N. E. Williamson, A. H. Heppner, and L. Dozier, with Dr. McCloskey of the State Hospital and Dr. Thos. W. Huntington of the Medical Board of the National Council of Defense as guests.

The reports of the delegates to the State convention being of minor importance, the floor was given to Dr. Huntington who gave an outline of the work of the Council of National Defense with his talk often interspersed with the doctor's natural eloquence and remarkable choice of diction.

Dr. Huntington had just returned from Washington as the Pacific Coast medical representative and was able to give an authoritative and illuminating talk on the situation as he found it at the national capitol. He told of the seriousness of the situation which the American nation had to face and appealed to the medical men to do their share in co-operating in the service which all must render to their country at this time.

Following the address of Dr. Huntington, a social hour was enjoyed.

DEWEY R. POWELL,
Secretary.

SANTA BARBARA COUNTY.

The Santa Barbara County Medical Society met April 9th at the Chamber of Commerce rooms, where they listened to an intensely interesting

paper on "The Value of Blood Pressure in Medicine," by Dr. Horace F. Pierce.

Applications for membership were received from three individuals, namely, Dr. C. A. Bell, Dr. J. C. Cummings, and Dr. F. H. Lay.

Very truly,

R. M. CLARKE, M. D., Secretary.

DEPARTMENT OF BACTERIOLOGY AND PATHOLOGY.

Edited by BENJAMIN JABLONS, M. D., San Francisco.

[This department has as its chief object the dissemination of the special knowledge that is being developed in the scientific laboratories of the world, and which are of practical interest to the medical practitioner. Abstracts of general articles will be published from time to time as well as preliminary reports of subjects that are of universal interest.]

JOURNAL OF MEDICAL RESEARCH. JANUARY, 1917.

Hall and Harvey conclude as a result of their extensive studies on forty-three patients suffering from pulmonary tuberculosis that the blood cultures fail to give positive findings even where secondary infection of the sputum is present. Out of fifty-two blood cultures but two were positive. Both were advanced cases, "open" and febrile. Despite the presence of secondary infection of the cavities it was possible to demonstrate but rarely a secondary bacteremia.

In addition they have found by a modification of the Koch-Kitasato method of isolating secondary micro-organisms of the sputum by repeated washings, that the most frequent invader present in association with pulmonary tuberculosis is the *Streptococcus Non-hemolyticus*.

Weston found that the Hydrogenion concentration of the spinal fluid varied little in the different psychoses and differed but little from the figures obtained by Hurwitz and Tranter in normal and syphilitic cases.

PROCEEDINGS OF THE SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE. 1915-1916.

Uric Acid, Urea and Creatinine in the Blood of Early and Late Nephritis;—Myers, Fine and Lough have determined as a result of the study of the Nitrogen partitions of the blood and urine that changes in the permeability of the kidney is followed by definite changes in the non-protein nitrogen group.

As the permeability of the kidney is lowered it becomes evident in the blood, first by an increase in the uric acid, second by an increase in the Urea and lastly by that of Creatinine. The early cases of interstitial nephritis give blood pictures that differ little from those of gout with regard to their high uric acid findings. The Urea varies, however, from slightly above to more than double the normal amount. When the latter condition is present the differential diagnosis between Gout and Interstitial Nephritis is rendered less difficult.

With increasing severity of the kidney condition the urea retention correspondingly increases. If improvement takes place the blood urea concentration gradually falls, although the uric acid percentage may remain high.

If the case goes on to a fatal termination the retention of uric acid and urea is followed by that of creatinin, the concentration of which may reach twenty times the normal. The phenolphthalein output then becomes practically zero.

Foster has found a toxic substance from blood in cases of toxic uremia. This toxic substance can be recovered in 200 cc. of uremic blood and will cause the death of a guinea pig. Control analysis of bloods from a wide variety of conditions not associated with uremia failed to discover a similar substance.

A. A. Epstein maintains it is erroneous to draw conclusions from the sugar concentration of the

blood without taking into consideration the variation in the blood volume.

This can be determined by means of the hematocrit without resorting to the use of any other complicated method.

A definite mathematical relation exists between the percentage of sugar in the urine and that of the blood. This applies only to individuals with the normal functioning kidneys. In those with defective kidneys the hyperglycemia is usually greater in proportion to the glycosuria. The total content may similarly increase and the percentage remain constant owing to an associated increase in the total volume of the blood, which measures the total blood volume.

Establishing the changes that occur in the proportion of the cells in the blood from time to time permits of computations of the alteration in the blood volume. The percentage of sugar may rise or fall as a result of a change in the volume of the blood caused by bleeding, anaesthesia, sweating or ingestion of fluid without the total content being in any way affected.

The total content may similarly increase and the percentage remain constant owing to an associated increase in the total volume of the blood. It is therefore necessary to make frequent estimations of the blood sugar to properly interpret the findings. Diuresis in Diabetes Mellitus plays an important role in determining the amount of sugar eliminated by the kidneys.

Diabetic Dietetics.—Janney and Czonka have determined the amount of glucose that various meats may yield by means of experiments upon phlorizinized animals. They have found that uncooked beef, chicken, chicken eggs, rabbit and fish yielded 9 to 12 per cent. of sugar. The solid substances of these materials produced from 36 to 48 per cent. glucose. Broiling and frying lead to considerable loss of water with corresponding increase of the percentage of glucose formation. Broiled beefsteak would yield 17.5 per cent. glucose. Flour gives rise to 92.5 per cent. of sugar calculated on an anhydrous basis.

They compute that 100 gm. of bread is equivalent to about 350 gm. of broiled beefsteak. In formulating diets for diabetics it is well to consider the glucose formation that may be derived from protein.

JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

Rosenow and v. Hess in investigating a severe epidemic of sore throat that occurred in Galesville, Wis., found an etiologic relationship between the streptococcus isolated from the throats of patients and that of milk that was derived from cows suffering from a mastitis. The disease occurred almost exclusively in patients that had consumed the milk. The streptococcus was found in enormous numbers in the material derived by stripping the udders of cows suffering from mastitis as well as those derived from some apparently normal cows. These streptococci were found to be highly virulent in animals and in one monkey produced a typical erysipelas after scratching with a wire that had been dipped into the infected material.

Swabbing the throat with cotton dipped in this milk produced an acute inflammation of the throat with acute enlargement of the lymph glands of the neck.

Heating the milk to sixty degrees for twenty minutes render the material innocuous. Rosenow and v. Hess conclude therefore that virulent bacteria may be present without any demonstrable sign of disease in the udder, and since it is impossible to avoid contamination of the milk in handling, it is important that universal pasteurization of milk be adopted.

DEPARTMENT OF PHARMACY AND CHEMISTRY.

Edited by FRED I. LACKENBACH.

(Devoted to the advancement of Pharmacy and its allied branches; to the work of the Council on Pharmacy and Chemistry of the American Medical Association, and to matters of interest bearing upon therapeutic agents offered to the medical profession. The editor will gladly supply available information on subjects coming within the scope of this Department.)

NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1917, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

Ferric Cacodylate; Iron Cacodylate.—A ferric salt of cacodylic acid containing from 39.7 to 44.9 per cent. arsenic (As). A grayish-brown powder, soluble in water. The use of ferric cacodylate has been proposed in cases where the effects of iron salts and the mild arsenic effect of cacodylates is desired. Dosage: From 0.015 to 0.1 Gm.

Ampules Iron Cacodylate-Mulford, 0.03 Gm.—Each ampule contains ferric cacodylate 0.03 Gm.—in 1 Cc. solution. The H. K. Mulford Co., Philadelphia.

Ampules Iron Cacodylate-Squibb, 0.03 Gm.—Each ampule contains ferric cacodylate 0.03 Gm. in 1 Cc. solution. E. R. Squibb & Sons, New York City (Jour. A. M. A., April 7, 1917, p. 1043).

Acetylsalicylic Acid-Squibb.—A non-proprietary brand of acetylsalicylic acid complying with the standards of New and Non-Official Remedies. E. R. Squibb & Sons, New York City.

Aspirin, L. & F.—A non-proprietary brand of acetylsalicylic acid complying with the standards of New and Non-Official Remedies. Lehn & Fink, New York City (Jour. A. M. A., April 28, 1917, p. 1261).

Ambrine.—Ambrine is a French, secret preparation that has been on the market for many years. It has recently come into prominence through sensational articles in the lay press. For all practical purposes it is solid paraffin to which some material has been added to make it adhesive and more plastic. For use it is heated until liquid and then applied to open wounds and burns, forming a relatively impervious dressing (Jour. A. M. A., April 7, 1917, p. 1057).

Paraffin Films.—The popular propaganda for "Ambrine" having brought the paraffin film treatment of burns into prominence, Torald Sollmann has instituted experiments to devise a suitable, open formula preparation which is simple and yet meets all requirements. He suggests that surgeons who desire to experiment with the paraffin treatment of burns use simple preparations of known composition. Ordinary paraffin melting at about 50 C. (122 F.) appears to possess practically the mechanical properties of "Ambrine." A mixture containing some asphaltum (asphalt varnish, Trinidad or Bermudez, "asphalt cement" and Texas asphalt were tried) gives a preparation of superior pliability. Other formulas are given and their trial suggested (Jour. A. M. A., April 7, 1917, p. 1037).

Cyanocuprol.—Studies of the effects of "cyanocuprol" on tuberculous processes, carried out by Japanese investigators, have been published. "Cyanocuprol" is stated to be a copper cyanid preparation, the exact composition of which is being kept secret. Even if its identity should become known, the use of "cyanocuprol" is decidedly in the experimental stage (Jour. A. M. A., April 7, 1917, p. 1057).

Corpora Lutea (Soluble Extract).—The Council on Pharmacy and Chemistry reports that "Corpora Lutea (Soluble Extract)," marketed by Parke, Davis